

## Sensor/actuator cable - SAC-4P- 2,0-PVC/M12FR - 1447109

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Sensor/actuator cable, 4-position, PVC, black-gray RAL 7021, free cable end, on Socket angled M12, A-coded, cable length: 2 m

As shown in the illustration but with a black handle

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Our standard: robust halogen-free PUR cable

RoHS

### Key Commercial Data

|                        |                                                                                                         |
|------------------------|---------------------------------------------------------------------------------------------------------|
| Packing unit           | 1 pc                                                                                                    |
| Minimum order quantity | 50 pc                                                                                                   |
| GTIN                   | <br>4 046356 661317 |
| GTIN                   | 4046356661317                                                                                           |

### Technical data

#### Dimensions

|                 |     |
|-----------------|-----|
| Length of cable | 2 m |
|-----------------|-----|

#### Ambient conditions

|                                 |                                  |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection            | IP65                             |
|                                 | IP67                             |
|                                 | IP68                             |

#### General

|                       |          |
|-----------------------|----------|
| Rated current at 40°C | 4 A      |
| Rated voltage         | 250 V AC |
|                       | 250 V DC |
| Number of positions   | 4        |

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## Technical data

### General

|                              |                               |
|------------------------------|-------------------------------|
| Insulation resistance        | $\geq 10 \text{ M}\Omega$     |
| Coding                       | A - standard                  |
| Standards/regulations        | M12 connector IEC 61076-2-101 |
| Status display               | No                            |
| Protective circuit/component | unwired                       |
| Overvoltage category         | II                            |
| Degree of pollution          | 3                             |
| Insertion/withdrawal cycles  | $\geq 100$                    |

### Material

|                                        |                                             |
|----------------------------------------|---------------------------------------------|
| Flammability rating according to UL 94 | HB                                          |
| Contact material                       | CuSn                                        |
| Contact surface material               | Ni/Au                                       |
| Contact carrier material               | TPU GF                                      |
| Material of grip body                  | TPU, hardly inflammable, self-extinguishing |
| Material, knurls                       | Zinc die-cast, nickel-plated                |
| Sealing material                       | NBR                                         |

### Standards and Regulations

|                                        |                 |
|----------------------------------------|-----------------|
| Standard designation                   | M12 connector   |
| Standards/regulations                  | IEC 61076-2-101 |
| Flammability rating according to UL 94 | HB              |

### Cable

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Cable type                                    | PVC black                                |
| Cable type (abbreviation)                     | PVC                                      |
| Cable abbreviation                            | LiYY                                     |
| UL AWM style                                  | 2464 / 1729 (80°C/300 V)                 |
| Conductor cross section                       | 4x 0.34 mm <sup>2</sup> (Signal line)    |
| AWG signal line                               | 22                                       |
| Conductor structure signal line               | 19x 0.15 mm                              |
| Core diameter including insulation            | 1.26 mm $\pm$ 0.05 mm                    |
| Thickness, insulation                         | $\geq 0.23 \text{ mm}$ (Core insulation) |
| Wire colors                                   | brown, white, blue, black                |
| Overall twist                                 | 4 wires, twisted                         |
| External sheath, color                        | black RAL 9005                           |
| Outer sheath thickness                        | $\geq 0.76 \text{ mm}$                   |
| External cable diameter D                     | 4.7 mm $\pm$ 0.15 mm                     |
| Minimum bending radius, fixed installation    | 5 x D                                    |
| Minimum bending radius, flexible installation | 10 x D                                   |
| Cable weight                                  | 40 kg/km                                 |
| Outer sheath, material                        | PVC                                      |

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Technical data

Cable

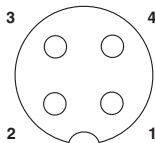
|                                 |                                                 |
|---------------------------------|-------------------------------------------------|
| Material conductor insulation   | PVC                                             |
| Conductor material              | Bare Cu litz wires                              |
| Insulation resistance           | ≥ 200 MΩ*km (at 20 °C)                          |
| Conductor resistance            | ≤ 57 Ω/km (at 20 °C)                            |
| Nominal voltage, cable          | ≤ 300 V                                         |
| Test voltage, cable             | ≥ 3000 V                                        |
| Ambient temperature (operation) | -40 °C ... 80 °C (cable, fixed installation)    |
|                                 | -25 °C ... 80 °C (cable, flexible installation) |

Environmental Product Compliance

|            |                                                         |
|------------|---------------------------------------------------------|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

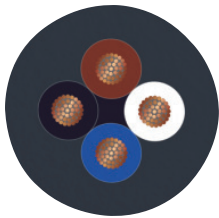
Drawings

Schematic diagram



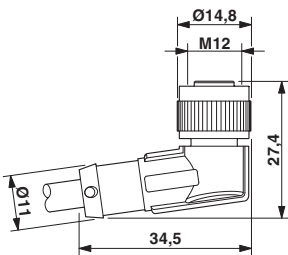
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



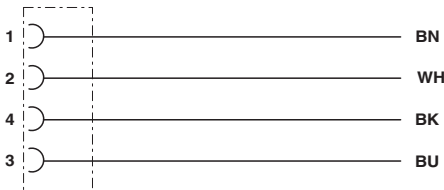
PVC black [PVC]

Dimensional drawing



M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 socket

Approvals

Approvals

## Sensor/actuator cable - SAC-4P- 2,0-PVC/M12FR - 1447109

### Approvals

Approvals

EAC

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Ex Approvals

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### Approval details

|     |                                                                                   |                          |
|-----|-----------------------------------------------------------------------------------|--------------------------|
| EAC |  | RU C-<br>DE.AI30.B.00767 |
|-----|-----------------------------------------------------------------------------------|--------------------------|

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